Development (1954) Department

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G.O. No. 2326

Dated 8-5-54

[Despatch Abstract.]

Government Servants' Conduct Rules - Broadcast talk on "Technical education by Sri P. Govinda Menon, Joint Director of Industries and Commerce - Text of the talk approved and permitted to receive remuneration therefor

TECHNICAL EDUCATION.

Technical education is training in any of the Mechanical Arts, applied sciences, or trades for practical purposes. There is operative skill or dexterity, to be acquired in everthing we do and technical education aims at improving this skill.

2. The primary function of technical instruction is that of satisfying the needs of industry and commerce for their main categories of technical personnel.

Viz: (a) skilled craftsmen
(b) intelligent foremen and executives, and
(c) research workers and chief executives.

The industrial product of today to commend a market must do its work efficiently, must be attractive to the purchaser and must pass easily and cheaply from the maker to the consumer. Technical education today must be a wider and more liberal form of training than it has been in the past, it must comprehened the scientific principles underlying the processes of manufacture as well as the processes themselves, it must link up the sciences of production and business organisation with the arts of design and salesmanship. The manufacturing fame of a country rests largely on the craftsmanship responsible for the high quality of its goods, and there is no more important aspect of industrial efficiency than this.

3. It has been accepted that the need for a considerable expansion in this branch of education in India is urgent. Hitherto the demand for technical personnel has been restricted partly by the limited number of openings which have been available in Industry and Commerce, and partly by the practice of filling the more remunerative posts with imported technicians. The supply of suitable students has been adversely affected not only by the uncertainty of subsequent employment, but also by the fact that young Indians of the middle and upper classes have not in the past taken readily to industrial occupations. Technical instruction itself has not escaped the over-academic atmosphere which characterises education generally in India, nor has it been linked up closely enough with the actual conditions obtaining in works and factories.

4. No country can initiate and carry on industries on a large scale, unless it has an adequate supply of men specially trained for the direction and management of large industrial concerns as well as of other qualified for the minor, but very important supervisory posts in them. On the other hand, it cannot be expected that capable and ambitious men will devote themselves to acquiring this special knowledge and skill unless they see a reasonable prospect of exercising it, gaining a decent livelihood thereby.

5. The experience of the war, however, has already led to a number of salutary changes; it has compelled a large expansion of Industry and created a greatly increased demand for technicians of all grades, while at the same time, the need for skilled and semi-skilled workmen had led to almost every technical institution in the country becoming a centre for Technical Training schemes. Many young men who would not otherwise have embarked on a technical career have been recruited under these schemes and the prejudice against Industrial Employment has been steadily breaking down. This process is likely to be accelerated in the near future with the introduction of the bifurcated courses of study in selected high schools as proposed by the Education Department of this Province.

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6. Only time can rectify the shortage of technical manpower in our country, but wise planning and the righ priorities can speed up the process. Considered from the point of view of the students, technical education will be either pre-employment or post employment, that is, it will either be directed to give young people not yet at work, a preliminary training which will prepare them for entry into industrial and commercial occupations, or it will afford opportunities to those already in employment for increasing their skill as craftsmen for fitting themselves to occupy positions of greater responsibility or for improving their all-round equipment as citizens as well as workers.

7. Technical education is necessarily expensive, owing among other reasons to the large amount of practical work involved and the cost of the plant and apparatus required. The amount, type and location of facilities for technical education will largely be determined by the requirements of industry and commerce but it is by no means clear at this stage what these requirements are going to be. New industries are now being established and the nucleus of a supply of labour for them has been created. Though it is impossible to any how many technicians will be required in eash each main employment category in industry and commerce, it is possible to prescribe the categories themselves and the sort of training their member will require. In the highest category there will be the chief executives as well as the research workers of the future. These will normally come from the Technological Department of a University or a College of Engineering teaching to the degree standard.

8. The next category will contain the minor executives, formen, charge hands etc. In India one cannot too strongly emphasise the need for concentrating on what may be called the supervisory grade. It is this grade between the management and the operatives which should have sufficient knowledge and intelligence to understand the instructions of the former and sufficient powers of expression to communicate and interpret them to the latter. At the same time, they should have sufficient practical skill to earn the respect and confidence of the operatives whose work they direct, control and supervise. This category of technical personnel will come from the Polytechnics.

9. The third category will comprise the skilled craftsmen, most of whom will not aspire to executive position. These may be recruited from Industrial Schools and Trade Schools.

10. Below these 3 categories will come the greatmass of semi-skilled and skilled labour. Provision has been made in some of our Technical schools for the workers to continue their technical education on a part-time basis by attending classes either in the day or the evening. Part-time day classes or the sandwich system constitute a factor of great importance in any modern scheme of technical education.

11. In 1944 the Government of Madras appointed a special Committee on Technical Education to report on the expansion of Technical Education in all its branches with particular reference to the immediate need for technical personnel to carry out the various plans of Government for post-war development especially in the first five years. The main recommendations of this Committee are:

That development of all grades of Technical Education should be on a regional basis. /contd:-

That 3 more Engineering Colleges be started in the Province, one being in the Ceded districts;

That more Polytechnics and Industrial schools should be started on a regional basis;

and That there should be an Apprentice Act enabling Government to make it obligatory on the part of employees to admit apprentices under a regulated scheme.

12. The Department of Industries and Commerce submitted to Government proposals to open new Polytechnics at Madura, Calicut, Mangalore, Vuyyuru, Coimbatore, Cocanada and Bellary and establish 6 new Government Industrial schools. Government have sanctioned all the Polytechnical and these will cost Government Rs.93½ lakhs non-recurring and Rs.78 lakhs recurring in the first 5 years. Proposals for the Industrial Schools are under Government's active consideration. The Polytechnics will teach to the diploma standard in Mehhanical Engineering, Civil Engineering, Electrical Engineering, Radio Engineering, Sound Engineering, Automobile Engineering, Chemical Engineering, Food Technology, Printing and Fisheries Technology Navigation. The Industrial Schools will train technical persons to the certificate standard in as many as 52 Trades including Black-smithy, Cabinet Making, Carpet Weaving, Fish Processing, Ligh Metal Casting, Pottery, Tailoring, Toy Making etc., etc. Examinations of the diploma standard will be conducted by a Technological Diploma Examination Board constituted by Government and representing the various Industries and Engineering Colleges in the Province.

The ground is therefore being rapidly prepared for the development of technical education in Madras on practical and up-to-date lines.

GOVERNMENT OF MADRAS
Development Departm

GOVERNMENT OF MADRAS
Development Department.
G.O.Ms.No.2330, dated 8th May 1948.

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ABSTRACT

Government Servants' Conduct Rules - Broadcast talk on Technical Education by Sri P. Govinda Menon, Joint Director of Industries and Commerce - Text of the talk approved and permitted to receive the remuneration therefor -

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READ:-

From the Director of Industries and Commerce, No.1125.E5/48, dated 16-4-1948.
From the Director of Industries and Commerce, No.1125.E5/48 dated 20-4-1948.

O R D E R:

His Excellency the Governor of Madras approves the text of the talk on 'Technical education in Madras' broadcast in English by Sri P. Govinda Menon, Joint Director of Industries and Commerce at 9-15 P.M. at Madras on 17th April 1948 and permits him to receive the remuneration offered therefor.

The action of the Joint Director of Industries and Commerce in having broadcast the talk in anticipatio of Government sanction is approved.

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Secretary to Government.

To
The Director of Industries and Commerce.
The Accountant-General, Madras.
The Station Director, All-India Radio, Madras.

/TRUE COPY/

Superintendent,
Madras Record Office.

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